

Six Sigma applied in Healthcare

Six Sigma is a data driven process improvement methodology based on DMAIC project management cycle (Define-Measure-Analyze-Improve-Control).

It was first applied in manufacturing and it is currently used across all business sectors, including financial services, marketing, sales, logistics, human resources, healthcare and public services.

Six Sigma enables hospitals and other medical institutions to improve patient safety and satisfaction by improving both medical and administrative performance.

❖ **A hospital in Holland**, was experiencing long delays of planned surgery and therefore patient dissatisfaction, due to inefficient use of the Operating Theaters. As this situation was a major concern, the hospital doctors and the management team were searching for a solution.



❖ As Operating Theaters (OTs) are expensive and capacity-limiting facilities, a **Six Sigma project** was launched to identify root causes for poor utilization. It was demonstrated, after executing the Define, Measure and Analyze steps, that low utilization of the OTs was due to: late starting of procedures, patients brought late and without being administered the prescribed medication, anesthesiologists and other specialists arrived late. Value Stream Mapping (VSM), root cause analysis and hypothesis testing were the tools used to find the root causes, identified as: waste in the process and inadvertent errors of doctors and nurses.

❖ **Solution** was defined during Improve phase and consisted in streamlining the operational process, introducing visual management and error-proof procedures (poka-yoke). Operating capacity for the OTs was improved by 25%, while patient satisfaction score increased from 3.2 to 4.5



Kindly attend Six Sigma trainings offered by Effective Flux to leverage this effective and efficient methodology.